Applicant: Wiethoff et al.

Application No.: 10/587,065

Remarks

Claims 1 to 37 are pending in this application; claims 25 to 32 are withdrawn from consideration; and claims 1 to 24 and 33 to 37 are rejected.

Claims 3 and 4 were canceled in the June 22, 2009 amendment, but this was not acknowledged in the Action.

Rejection Under 35 U.S.C. §112

Claims 1 and 37 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claim 1 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite apparently because the claim recites the limitations of distinguishing the object type as either a particle object or a non-particle object and then distinguishing the object type as either a mineral particle or a biological particle object. Apparently, it is unclear how an object could be a nonparticle object in step 1, and then be further distinguished as a mineral particle or a biological particle in step 2. The examiner believes that the second step would only be acceptable in the case where the first distinguishing step resulted in the determination the object is a particle object. (Action, pg. 2.)

Applicants respectfully disagree with the examiner because the steps recited in claim 1 are not necessarily sequential. Nonetheless, a minor amendment could be made to make the steps sequential and recite that step 2 is performed if step 1 determines the existence of a particle object.

Claim 37 was also rejected under 35 U.S.C. §112, second paragraph, as being indefinite because the examiner apparently believes it is unclear how a defect is distinguished from an

object when the defect could be within the definition of a non-particle object. The examiner

states, "Since defects fall under non-particle type, they would have to be considered by the object

recognition rule in claim 1, in order to determine their type and therefore could not be excluded

as claimed." (Action, pgs. 2 and 3.) Applicants respectfully disagree with the premise that all

defects fall under non-particle type.

In paragraph 29 of the amended specification it states, "Defect objects may be caused e.g.

by particles from a prior measuring or by drops or fly specks e.g. on the camera, or by defects,

scratches or grooves etc. on the measuring surface." Thus, a defect could be an object-type

particle from a prior measuring, for example. Applicants respectfully submit that this explanation

traverses the rejection because claim 37 recites a first step of distinguishing the object from a

defect and then excluding the defect from the rule.

Rejection Under 35 U.S.C. §103

Next, claims 1, 2, 5 to 24, and 34 to 37 were rejected under 35 U.S.C. §103(a) over

Oosterling et al. for the reasons set forth in the action from pages 3 to 8. Claim 33 was rejected

under 35 U.S.C. §103(a) as being obvious over *Oosterling et al.* in view of *Maier* for the reasons

stated at pages 7 and 8 of the action.

Rather than repeating earlier arguments about Oosterling et al., Applicants wish to

address the action at page 8 where the examiner responds to Applicants' previous arguments that

Oosterling et al. reference fails to teach an object recognition rule for distinguishing particles

from non-particles other than by visual inspection. The examiner believes that during a visual

inspection, any number of object recognition rules would be used to determine a presence of

particles, and that a user merely viewing an image of the filter would be able to use a rule to

10

determine the color, shape, size etc. The examiner asserts that for this reason independent claim

1 does not distinguish itself from Oosterling et al.

Applicants also argued that the prior art does not teach a method of automatically

determining the contamination or particulate in the sample, but the examiner asserts that this

limitation is not positively recited in the present claims. To overcome this argument, Applicants

now amend the claims to recite that steps are performed automatically by a determination device,

for example. This amendment addresses the examiner's interpretation of the claims and

distinguishes Oosterling et al.

Allowability of claims

In view of the amendments and the above comments regarding the deficiencies of

Oosterling et al., Applicants respectfully submit that amended claim 1 would not have been

obvious because Oosterling et al. fails to teach, motivate or suggest an object recognition rule

that distinguishes particles versus non-particles or biological versus mineral objects using a

determination device.

Further, without improper hindsight, there is no teaching, suggestion or motivation in

Oosterling et al. to use an object recognition rule with a determination device as recited in

amended claim 1 to detect and distinguish the objects in a milk sample that are particle versus

non-particle or biological versus mineral. Certainly, there is no suggestion to modify Oosterling

et al. to use an object recognition rule with a determination device because Oosterling et al. fails

to disclose any means other than a light, a dark filter, and a camera for viewing objects.

There is no teaching, suggestion or motivation to use a light and camera to obtain a

method for determining the presence of an object, whether the object is a particle or non-particle,

and whether the object is biological or a mineral, as recited in amended claim 1. Further the size,

11

Applicant: Wiethoff et al.

Application No.: 10/587,065

shape, color, hue, contrast, or type of an object from a milk sample, as recited in the dependent

claims would not have been obvious to one of ordinary skill in the art. Therefore, these claims

are not obvious, and are allowable.

Oosterling et al. also fails to disclose a method for distinguishing faults and excluding

them from any determination by the object determination rule, as recited in claim 37, or milk

quality grades as recited in claim 24.

Applicants respectfully submit that pursuant to 35 U.S.C. §112, paragraph 4, the

dependent claims incorporate by reference all the limitations of amended claim 1 and include

their own patentable features, and are therefore in condition for allowance. Therefore, Applicants

respectfully request the withdrawal of all rejections and prompt allowance of the claims.

Conclusion

For the foregoing reasons, Applicants respectfully submit that the pending claims are

allowable, and request that this case be passed to issue.

Respectfully submitted,

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12